about 1.75 inches; length of longest spines in tail, 1.6 inches; length of longest spines from side, 1.5 inches; greatest diameter of spine, 0.1 inch; from tip of snout to the eye, 2.5 inches; from tip of snout to base of skull, about 4 inches; from vent to the tip of the tail, 1.6 inches.

# The Ophidians of the Chevert Expedition-by WILLIAM MACLEAN, F.L.S.

Most of the Snakes collected during the voyage of the Chevert were procured at the Katow River, on the South Coast of New Guinea.

The character of the country at that place, and for many miles East and West of it, and probably for a long distance inland, is exactly of the kind best suited for the abode of Reptiles. It may be described as a huge Delta, everywhere intersected by water channels, nowhere elevated more than a few feet above the surface of the swamp, with a dense and magnificent vegetation, a moist climate, and perpetual heat.

My visit to the place was a very hasty one. The Chevert anchored off Katow on the 2nd of July, 1875, and left again on the 11th of the same month; only a very few days, therefore, were available for collecting purposes, and of these but little use could be made, as the impenetrable and swampy nature of the country effectually baffled all attempts to get any distance from the sea shore. It is almost entirely to the natives that I am indebted for the Reptiles of that part. Maino, the head man of the village; his son Cooki, a fine lively boy of about twelve; and Howtah, the chief of a neighbouring village, with a number of others, showed a most friendly desire to get for me whatever I wanted. Not a day passed that I did not receive from them joints of bamboo tightly plugged up which were invariably found to be full of Snakes.

All the species from Katow turn out to be new. That, perhaps, is not to be wondered at, as I was the first who had ever attempted to collect on that part of the New Guinea coast; but what is more remarkable is the prevalence of the non-venomous Colubrine forms of India and Malacca, and the absence of the venomous Australian forms. It would be interesting to know whether Signor D'Albertis' experience on this point agrees with mine. He has, I am told, brought with him from Katow, a very fine collection of Reptiles, but they are all destined, I believe, to enrich foreign Museums.

The other localities at which Snakes were collected during the voyage were, the Islands of Torres Straits and Hall Sound, New Guinea, but as will be seen in the detailed account given below, they are neither remarkable nor numerous.

## FAMILY PYTHONIDÆ.

#### 1.---MORELIA VARIEGATA.

Gray, Zool. Misc. 43, 44; Cat. Brit. Mus., Snakes, part VI., p. 86; Krefft, Snakes of Australia, p. 31.

Morelia Argus, var. c. Dum. and Bibr. Erp. Gen. VI., pp. 386-389.

This species seems to have a very wide range. It is common over the whole interior of New South Wales, where it is known as the "Carpet Snake," and there seems to be no part of Queensland or Northern Australia in which it is not found. My Chevert specimens are from Sue Island, Darnley Island, and Hall Sound. One specimen from the last-named locality is probably of a different species; it seems proportionally thicker in the body and shorter in the tail than the others, and is of a generally darker colour, with the ventral shields greenish white, barred with blackish green.

#### 2.-LIASIS AMETHYSTINUS.

Gray, Zool. Misc. 44; Dum. and Bibr. Erp, Gen. VI., p. 432; Gray, Cat. Brit. Mus., Snakes, part 1, p. 91; Krefft, Snakes of Austral., pl. 5, figs. 5–5a.

Boa amethystina, Schneid. Amph. 2, p. 254; Denk. Akad., Münch, 7, t. 7. Python amethystinus, Daud. Rept. 5, p. 230; Merrem, 89; Schlegel, Phys. Serp. 178, 419, t. 15, figs. 8-10.

Constrictor amethystinus, Boie, Isis XX. 516.

In the description given of this species by Dumeril and Bibron, the scales on the body are said to be in 47 rows, and on the tail in 27. In my largest specimen there are 45 on the body and only 10 on the tail. There is also a difference in the number of the abdominal and subcaudal shields. According to Dumeril and Bibron, the abdominals are from 303 to 316, and the subcaudals from 85 to 86; while I find them to be, abdominals 325, subcaudals 119-119. Notwithstanding this apparently wide dissimilarity, I have no doubt they belong to one and the same species.

The collection contains several specimens from Darnley Island and Hall Sound. One of those captured at the latter place measured 14 feet in length, and was of great thickness.

## FAMILY HOMALOPSIDÆ.

## 3.-FORDONIA PAPUENSIS.

I place this species in Gunther's genus Fordonia, because it seems to fit better into it than into any other genus of the Homalopsidæ, and I wish to avoid the multiplication of genera, but I must observe that the generic character, "eyes over the third labial shield," does not at all apply to the present species. The head is oval and moderately flat; the anterior frontal shield is longer than broad, and is rounded behind and separates for some distance the two posterior frontals; the eye is very small, and does not come into contact with any labial shield, being completely surrounded by the anterior and two posterior ocular shields, and the superciliary, which is very small. There are five upper labial shields, all higher than long, excepting the last. -The body is stout, cylindrical, and tapering at the tail. Scales in 22 series; abdominal shields 147, subcaudals 32-32, some of them sometimes single. Anal plate bifid. Total length, 2 feet; length of tail, 3 inches. Colour, bluish-brown above getting lighter on the sides, and yellow beneath.

Several specimens were got at Katow.

## FAMILY CALAMARIDÆ.

## MAINOPHIS (NEW GENUS.)

Body moderately stout, cylindrical; tail short, tapering to a blunt point; head narrow; two pairs of frontal shields, the anterior pair small, the posterior large, and occupying the position of the loreal; nostril between two nasal shields, the anterior much the largest; one anterior and two posterior ocular shields; superciliary shield small; six upper labial shields; eyes small; scales smooth, and somewhat triangular and rounded at the apex; anal plate bifid; subcaudals in two rows.

This genus seems to resemble in many points the genus *Brachyorrhos*, of Kuhl. The entire anal plate of the latter necessitates the separation of the genera.

## 4.-MAINOPHIS ROBUSTA.

Head moderately flat, and scarcely narrowed into a neck behind; posterior frontal shield abutting on the second labial. Back of a dark lead colour, with the scales on the sides edged with white; abdominal shields quite white Scales in 17 rows. Abdominal shields 161, subcaudals 46-46. Total length, 2 feet 6 inches; length of tail 5 inches, and of head 1 inch.

Two specimens were procured at Katow.

## KATOPHIS (NEW GENUS.)

Body and tail rather elongate, head rather narrow with a slightly constricted neck; two pairs of frontal shields, a loreal and one anterior and three posterior orbitals; eight upper labials; scales elongate, keeled, the outer scale on each side square and not keeled on the anterior half of the body; anal plate bifid; subcaudals in two rows; eye large, pupil rounded; teeth equal, smooth.

I do not know any genus approaching this, unless it may be *Elapoidis*, of Boie.

## 5 --- KATOPHIS PLUMBEA.

Scales in 15 rows; abdominal plates 142, subcaudals 67-67. Total length, 2 fect 3 inches. Tail,  $6\frac{1}{2}$  inches; head, 10 lines. Colour, lead brown above, yellowish white beneath; labials, temporals, and side of neck bright yellow.

Several specimens from Katow.

#### FAMILY DENDROPHIDÆ.

#### 6.-DENDROPHIS BREVICEPS.

Body elongate, with the ventral shields moderately keeled; head rather short and broadly rounded before the eyes; loreal shield a little longer than high; eight upper labials. the 6th almost surrounded above by the 5th and 7th shields; lower labials, 9; scales in 13 rows anteriorly and 11 posteriorly; abdominal shields, 197; sub-caudals, 145-145; anal plate bifid. Total length, 4 feet. Length of tail, 16 inches; head, 1 inch. Colour, olive green above, beneath yellowish white.

This species may be distinguished from *D. punctulata* by its shorter and blunter head and more slender form, as also by the squarer form of the loreal shield, the greater number and different disposition of the upper labial shields, and by the difference in the relative length of the tail, and in the numbers of the abdominal and subcaudal shields.

Three specimens were procured at Katow.

## 7.—Dendrophis Katowensis.

Very elongate, narrow, and strongly keeled on the ventral shields; head flat, with constricted neck; loreal shield thrice as long as high; upper labials 8, lower 8; scales in thirteen rows anteriorly and eleven posteriorly; abdominal shields, 189; subcaudals, 135-135; anal bifid; total length, 3 feet 8 inches; tail, 15 inches; colour, pale olive above, whitish beneath, with the labial shields yellow and a black stripe from the upper part of the rostral shield through the loreal and temporals along the side of the neck for two or more inches behind the head. This black mark is narrow on the head, but on the neck has the width of four scales.

This species has a considerable resemblance to a *Dendrophis* which I received some years ago from the Endeavour River, and

which for some time I took to be D. Calligastra, Gunth. I believe now that I have never seen the last-named species, nor have I ever came across a *Dendrophis* without the loreal shield.

Two specimens from Katow.

#### 8.—Dendrophis Darnleyensis.

Very elongate and strongly keeled on the ventral shields; head broad and flat, loreal shield twice as long as high; upper labials 8, lower 9; abdominal shields 175, subcaudals 130-130; total length, 3 feet 6 inches; tail, 15 inches; colour, olive above, beneath greenish white, speckled with black. As in the last species, there is a black stripe from the muzzle along the side of the neck, but in this species it is broader on the head, and leaves a yellow spot on the lower part of the anterior ocular shield and on the upper part of the posterior ocular. I am inclined to think that this is identical with the species mentioned above as having, come from the Endeavour River.

Two specimens were captured at Darnley Island.

## FAMILY DIPSADIDÆ.

9.-DIPSAS FUSCA.

Dendrophis fusca, Gray, Zool. Misc. 1842, p. 54.

Triglyphodon flavescens, Dum. and Bibr., p. 1080.

Dipsas fusca, Gunth. Cat. Brit. Mus., Snakes, p. 171; Krefft, Snakes of Australia, p. 26, pl. V. f., 7-7a.

One young and small specimen was got at Katow. I am not by any means confident that it is not a distinct species.

## FAMILY LYCODONTIDÆ.

#### 10.-LYCODON DARNLEYENSIS.

Body moderately elongate and compressed, with the median line of the back and each side of the abdominal shields slightly angled; head narrow, slightly narrowed at the neck; rostral shield large and triangular above, loreal longer than high; one anterior and two posterior oculars; upper labials 9, lower 10; eye small, abutting on the 4th and 5th labials; pupil elliptical;

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scales in 17 series, smooth and rounded; abdominal shields 198, subcaudals 53-53 (not perfect); total length, 2 feet 8 inches; tail, about 6 inches; colour above nitid olive brown, beneath deep yellow.

One specimen from Darnley Island.

## PAPPOPHIS (NEW GENUS.)

Body elongate, moderately stout, and slightly trigonal; tail long and tapering; head broad, flat towards the muzzle which is broad and rounded, and constricted behind into a narrow neck; loreal shield not longer than high, except at the lower posterior angle, where it is continued into a point; nostril large between two nasal shields; rostral shield pointed above; frontal shields 4, pentagonal, the posterior pair largest : one large anterior and two small posterior ocular shields; upper labials 9, lower 12; eyes large, in contact with 4th, 5th, and 6th upper labials; anterior teeth in both jaws long, acute and pointed backwards; scales narrow and pointed, the vertebral series larger and rounded; anal shield entire; subcandals in two series.

I place this genus among the Lycodontida of Gunther, chiefly on account of its teeth, though its affinity to the Dipsadida seems to be quite as great.

## 11.—PAPPOPHIS LATICEPS.

Scales in 21 series on the anterior part of the body, and in 15 towards the tail; abdominal shields 258, subcaudals 115-115; total length, 6 feet 4 inches; tail, 15 inches; length of head,  $1\frac{1}{2}$  inches; width of head 1 inch 2 lines, width of neck 4 lines; colour, above greenish brown, beneath greenish yellow sometimes finely mottled with brown.

This species seems to be abundant about Hall Sound. The short but very broad and round-muzzled head, gives it a most formidable appearance, and the extent of its gape may be imagined when I state that Mr. Masters took out of the stomach of one of the specimens now before me, an average-sized hen's egg, which had been swallowed without receiving the slightest injury. The neck is narrow and compressed for several inches from the head; the tail is long, tapering and slightly compressed.

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## 12.-PAPPOPHIS FLAVIGASTRA.

Scales as in the last; abdominal shields 264, subcaudals 94-94; total length, 5 feet 2 inches; tail, 11 inches; length of head,  $1\frac{1}{3}$  inches; width of head, 10 lines; width of neck, 5 lines; colour, above pale olive brown, beneath yellow, getting darker towards the tail.

This species differs from the last not only in the number of the abdominal and subcaudal shields and in coloration, but it is proportionally much narrower in the head and shorter in the tail. The loreal shield also is more square. The ventral plates are distinctly keeled, but the tail is almost quite cylindrical.

One specimen was obtained at Katow.

#### VENOMOUS SNAKES.

#### 13.—DIEMENIA PAPUENSIS.

Body elongate and slender; head long, narrow, flat between the eyes and rather convex in front; scales in 15 rows; anal shield bifid; abdominal shields 225, subcaudals 88-88; total length, 5 feet 6 inches; tail, 15 inches; praeocular shield deeply grooved; vertical shield elongate and narrow; superciliaries overlapping the eye. The colour of the head is pale olive, with the under side to the lower edge of the upper labial shields, yellow, and with numerous brown spots on the vertical, superciliary and occipital shields; the scales of the body are of a dark nitid brown, the abdominal shields are of a light slate colour, and the subcaudals pale brownish yellow.

This species seems to come near *D. Psammophis*; indeed I should probably have taken it for one had I not found that the specimens of *D. Psammophis* in the Australian Museum are undoubtedly distinct.

The collection contains only one specimen, and the exact locality of its capture is not mentioned; it is simply labelled New Guinea. I think it must have been got at Hall Sound.

## 14.—ACANTHOPHIS LAEVIS.

All the head shields and scales of the body quite smooth; superciliary shields much elevated over the eyes; only one posterior ocular; scales in 21 rows; abdominal shields 113, subcaudals 24 undivided, the others not complete; total length, 17 inches; tail,  $2\frac{1}{2}$  inches; colour, uniform very pale brown above, beneath yellow; the lower labials have each a large black spot, the last upper labial and the temporal shield abutting on it are similarly marked, there is also a black semicircular groove in front of the rostral shield; the abdominal and subcaudal shields are broadly barred with black, interrupted in the middle on the body, but continuous on the tail; there are also spots on the outer body scale on each side.

Most unfortunately the tail in my only specimen is imperfect, but I am satisfied that it is really an *Acanthophis*, notwithstanding the smooth scales; in almost every other respect it agrees with the generic characters of *Acanthophis*.

It was procured at Katow.

## FAMILY HYDRIDÆ.

#### 15.—PLATURUS SCUTATUS.

Gunth. Rept. Brit. Ind., p. 356; Krefft, Snakes of Aust., p. 89. One young specimen was taken in Hall Sound, and it was the only sea snake captured during the Expedition. A species was frequently seen, however, lying on the surface of the water, but it invariably went down as the ship approached. I made an effort at Darnley Island to get the natives to procure me a specimen of it, but they assured me that the snake never left the water, and that it was impossible to get it. The colour seemed to be uniform yellow, the length from 3 to 4 feet, and the thickness quite 2 inches.

Continuation of the Mollusca Collected during the Chevert Expedition.

By J. BRAZIER, C.M.Z.S., Cor. Mem. Roy. Soc, Tas. SUB-FAMILY UMBONIINÆ.

Trochus vestiarius, Linn. Syst. Nat. ed. 12, p. 1230. Rotella lineolata, Lam. Anim. Sans, Vert., tome 7, p. 7.